

Wisconsin Commercial Building Code Multiple Use Options

Buildings that existed or were submitted for approval prior to July 1, 2002, may be eligible for certain alternative design options. Also, for new and existing buildings, the WCBC classifies non-accessory assembly uses serving fewer than 50 persons as B occupancies.

Incidental uses (IBC 302.10) - Certain higher risk uses must be separated, sprinklered, or both. Do not use the accessory use option. Alternatively, the appropriate occupancy classification may be assigned to some spaces (in lieu of incidental use) and mixed use options (below) may be used.

Accessory uses (IBC 302.2) - Except for Group H occupancies, uses that are accessory to the main occupancy may be up to 10 percent of the floor area on a story, or also for Group A accessory uses up to 50 occupants (750 sq. ft.), without being separated. The height or area of an accessory use shall not exceed its Table 503 value. Note that unlimited area buildings could have large allowable accessory uses up to the applicable Table 503 value.

Mixed Use Options

Non-separated Use Option (not available to H occupancies) (IBC 302.3.2)

- Apply most restrictive type of construction, height, and area requirements to the building as a whole or to the fire area.
- Apply other requirements to the specific occupancy areas.
- Apply fire protection thresholds and requirements based on each use to the whole building. Unless separated with fire barriers (horizontal assembly), a fire area includes multiple floors.
- Apply the most restrictive high rise requirements of section 403 to the whole building.
- Apply the exterior wall requirements according to the specific occupancy contained behind that wall.
- Several non-separated uses may create a single fire area in a building.

Separated Use Option - creates separate fire areas (IBC 302.3.3)

- There is no requirement to separate like uses (same occupancy group and subgroup), even if under separate tenant ownership. However, separating them will reduce the fire area, upon which certain other requirements are based.
- If multi-story, determine the minimum class of construction for each occupancy on **its floor**.
- Apply the resulting most restrictive type of construction requirements to the whole building.
- Cannot take sprinkler increase unless the whole building is completely sprinkler protected.
- Can apply the frontage increases based on the total building perimeter, not just the perimeter of the individual occupancies.
- Apply all exterior wall requirements according to the specific occupancy contained behind it.
- If several occupancies are on the same floor, then need to pro-rate the allowable areas so that the sum of the fractions (ratios) of actual area to allowable areas does not exceed one. (Note that if an occupancy is allowed unlimited tabular area, then ignore it in this calculation.)
- Apply fire protection thresholds and then the requirements to fire area or building as indicated.

Firewall - Separated Uses - creates separate buildings

- Apply type of construction requirements, height and area requirements separately to each part (building). Frontage increase applies to each building separately; the fire wall length is part of the perimeter for each building, but has no frontage length contribution.
- Apply fire protection requirements to each part as separate buildings.
- Sprinkler protection credit may apply to just the sprinkler protected portion.

Other Relevant Code Sections

Section 307.2 and 414 H uses - If hazardous material is kept to less than what is allowed in a control area or fire barriers are provided to create control areas up to what is allowed by the code, then there is no separate group H occupancy.

Section 402 Shopping Malls - Requires a one-hour fire partition between tenant spaces of a shopping mall.

Section 406.6.2 Repair garages - Prohibits the non-separated mixed use option for repair garages. This prohibition is applicable to adjacent tenants or non-related uses.

Section 415.3.2 H uses - Requires that all group H-1 occupancies and certain groups H-2 and H-3 occupancies to be located in separate buildings.

Section 507.5 H-2, H-3 and H-4 occupancy in an unlimited area building - In a group F or S occupancy, an H fire area located on the building perimeter can be the lesser of 10 percent of building area or Table 503, as modified for frontage **on the H fire area only**. If the H fire area is not on the building perimeter, then only 25 percent of the group H-2, H-3, or H-4 Table 503 area is allowed.

Section 508 Options - This section has several options that permit a three-hour horizontal separation between a parking garage with independent means of egress and certain other occupancies to create separate buildings for purposes of height and area, class of construction, and sprinkler protection.